Status of the Claims:

Claims **1-6:** (Canceled)

7. (Original) An apparatus comprising:
a chamber, wherein said chamber has a gas inlet port; and
a rotor, wherein:
said rotor is disposed within said chamber;
said rotor has a first end and a second end;
said rotor has a pivot point disposed between said first end and said second end;
said rotor has a long axis that is defined to align with said first end and said second end;
and further wherein when gas flows through said gas inlet port, it flows in a direction that is toward said pivot point and substantially aligned with said long axis of said rotor.

8. (Original) The apparatus of claim 7 wherein said chamber and said rotor collectively compose a first stage of a two-stage valve, and wherein said rotor selectively couples said gas inlet port to a second stage of said two-stage valve.

9. (Original) An apparatus comprising:
a chamber, wherein said chamber has a gas inlet port; and
a rotor, wherein:
said rotor is disposed within said chamber;
said rotor has a first end and a second end;
said rotor is positionable in a first position in which said first end blocks said gas inlet port to substantially prevent a first flow of gas from entering said chamber through said gas inlet port; and
said first end of said rotor does not contact a seating surface when it is in said first position.

10. (Original) The apparatus of claim 9 wherein said chamber further comprises a control volume port and a gas vent port, and further comprising:

a bore, wherein said bore is pneumatically coupled to said control volume port; and

a piston, wherein said piston is disposed in said bore;

and wherein when said rotor is in said first position, said control volume port and said gas vent port are pneumatically coupled and said cylinder is depressurized.

11. (Original) The apparatus of claim 10 wherein said piston regulates a second flow of a gas into a nozzle, wherein said first flow of gas is less than 10 volume percent of said second flow of gas.

12. (Original) The apparatus of claim 10 wherein said rotor is positionable in a second position in which said second end blocks said gas vent port to substantially prevent gas from flowing out said gas vent port, and wherein when said rotor is in said second position, said gas inlet port and said control volume port are pneumatically coupled and said bore is pressurized.

13. (Original) The apparatus of claim 12 wherein when said rotor is in said first position, said piston is in a retracted position in said bore.

14. (Original) The apparatus of claim 12 wherein said rotor rotates about 10 degrees or less between said first position and said second position.

15. (Original) An apparatus comprising:

a chamber; and

a rotor, wherein said rotor is disposed within said chamber and is movable to control a first flow of gas into said chamber, and wherein said rotor and chamber are dimensioned and configured such that when said rotor moves to control said first flow of gas, said rotor:

does not lift against a pressure load;

is substantially insensitive to pressure imbalances; and

is substantially insensitive to g-loads.

16. (Original) The apparatus of claim 15 wherein a direction of motion of said rotor is substantially perpendicular to a direction of said first flow of said gas into said chamber.

17. (Original) The apparatus of claim 15 further comprising a bore, wherein said chamber is pneumatically coupled to said bore.

18. (Original) The apparatus of claim 17 further comprising a piston, wherein said piston is disposed in said bore, and further wherein said piston is movable between a first position and a second position.

19. (Original) The apparatus of claim 18 wherein in a first position of said rotor, said rotor couples said first flow of gas to said bore, causing said piston to move to said first position.

20. (Original) The apparatus of claim 19 wherein in a second position of said rotor, said rotor de-couples said first flow of gas from said bore, causing said piston to move to said second position.

21. (Original) The apparatus of claim 19 further comprising a nozzle, wherein when said piston is in said first position, said piston blocks a second flow of gas into said nozzle.

22. (Original) The apparatus of claim 21 wherein when said piston is in said second position, said second flow of gas enters said nozzle.

23. (Original) The apparatus of claim 22 wherein said first flow of gas is withdrawn from said second flow of gas and is less than ten volume percent of said second flow of gas.

24. (Original) An apparatus comprising:

a chamber, wherein said chamber has an inlet port, and control volume port and a vent port; and

a rotor, wherein:

said rotor is disposed within said chamber;

said rotor has a first end and a second end;

said rotor pivots less than about 10 degrees between a first position and a second position;

in said first position, said second end of said rotor blocks said vent port and pneumatically couples said inlet port and said control volume port; and

in said second position, said first end of said rotor blocks said inlet port and pneumatically couples said control volume port and said vent port.

Claims **25-33:** (Canceled)